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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/644,377	08/23/2000	Marco Di Benedetto	112025-0201	1520

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CESARI AND MCKENNA, LLP
88 BLACK FALCON AVENUE
BOSTON, MA 02210

EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 05/27/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/644,377

Applicant(s)

BENEDETTO ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 3/12/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-29 is/are allowed.
- 6) ☒ Claim(s) 1-20 and 23-25 is/are rejected.
- 7) ☒ Claim(s) 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, 12, 13, 16-20 and 23 are rejected under 35 USC 103(a) as being unpatentable over **Goldman et al.** (US Pat. No. 6,628,661 B1) in view of **Reagan et al.** (US Pat. NO. 6,578,086 B1).

In claims 1, 2, 7 and 16-20 and 23, **Goldman et al.** discloses, in Fig.3 & fig.5, an automatic spanning tree recovery method without administrator intervention (without using active or standby supervisors). See col.8, lines 5-10. Refer to Fig.3, switch A2 (network device) transitions from a detected root port failure connected to link 32 to a new port connected to link 33 (transition among spanning tree port states for continuing operation when crashes occur). Switch A2 reconfigures the new port to be in a forwarding state to switch B1, at which point link 33 becomes a part of spanning tree (forwarding message in a network). See col.8, lines 15-45. Switch A2 broadcasts topology change notification to the root to provide topology change has occurred (generating and forwarding topology change notification messages). See col.8, lines 45-50. Switch ports information is stored and updated continuously in the switch (storing port states at the device). See col.7, lines 50-60. **Goldman et al.** does not disclose an active supervisor and

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a standby supervisor. **Reagan et al.** discloses, in Fig.2, a bridge 200 (network device) comprising a controller 206. The controller 206 determines active network topology based on link state information (see col.6, lines 60-67) (an active supervisor). Since Goldman et al. discloses automatic spanning tree recovery method without administrator intervention (without using active or standby supervisors). Therefore, it would have been obvious to one ordinary skills in the art to use the controller of Reagan into the Goldman because only one controller is needed to determine active spanning tree protocol associated with a failure in the network. The motivation is to avoid significant network disrruption.

In claims 6 and 12, the limitations of these claims have been addressed in claim 1.

In claim 13, the generating and forwarding of BPDU message comprising TC flag field from a port of a network device has been known for one ordinary skill in the spanning tree protocol.

Allowable Subject Matter

Claims 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In claim 21, the prior art does not disclose a first manager disposed at the active supervisor, the first event manager configured to generate port change events in response to the ports transitioning from a current spanning tree port state to a new spanning tree port state.

Claims 26-29 are allowed.

The following is an examiner's statement of reasons for allowance:

In claim 26, the prior art does not disclose an event manager at the first and the second supervisors, the event manager configured to transmit spanning tree port state information from the active supervisor to the standby supervisor.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments with respect to claims 1-20 and 23-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gai et al. (US Pat. No. 6,032,194) discloses Method and Apparatus for Rapidly Reconfiguring Computer Networks.

Seaman (US Pat. No. 6,611,502 B1) discloses Spanning Tree with Rapid Propagation of Topology Changes.

Regan et al. (US Pat. No. 6,578,086 B1) discloses Dynamically Managing the Topology of a Data Network.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703 306-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-3988 for regular communications and 703 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Fax number : 703 872-9314

Hanh Nguyen

A handwritten signature in black ink, appearing to read 'Hanh Nguyen', written over the typed name and date.

May 26, 2004